### **GEOSTATS PTY LTD**

**Mining Industry Consultants** Reference Material Manufacture and Sales

Certified Pulp Rare Earth Reference Material

# **GRE-08**

### **Certified Control Values**

Method	Element	Units	Grade	Standard Deviation	No of Analyses	95% Confidence Interval
Fusion / ICP	Al	%	3.23	0.11	50	+/- 0.04
	Ва	ppm	4047	157	50	+/- 46
	Ca	%	0.6	0.1	50	+/- 0.1
	Ce	ppm	5099	85	30	+/- 33
	Dy	ppm	143	6	50	+/- 2
	Er	ppm	33.8	1.4	50	+/- 0.5
	Eu	ppm	108.8	4.8	50	+/- 1.4
	Fe	%	33.37	1.03	48	+/- 0.31
	Gd	ppm	283	13	49	+/- 4
	Но	ppm	19.1	0.6	48	+/- 0.2
	La	ppm	1467	51	40	+/- 17
	Lu	ppm	1.8	0.3	50	+/- 0.1
	Mg	%	0.50	0.02	50	+/- 0.01
	Mn	ppm	1329	89	40	+/- 29
	Nb	ppm	1040	35	40	+/- 12
	Nd	ppm	4433	197	50	+/- 57
	Р	ppm	8979	348	40	+/- 113
	Pr	ppm	953	36	50	+/- 11
	s	%	0.07	0.01	30	+/- 0.01
	Sc	ppm	91	6	40	+/- 2
	Si	%	14.1	0.6	50	+/- 0.2
	Sm	ppm	515	15	50	+/- 5
	Sr	ppm	206	9	50	+/- 3
	Та	ppm	12	1	50	+/- 1
	Tb	ppm	33.4	1.6	49	+/- 0.5
	Th	ppm	731	20	50	+/- 6
	Tm	ppm	3.0	0.1	50	+/- 0.1
	U	ppm	41.1	1.5	50	+/- 0.5
	Υ	ppm	448	19	50	+/- 6
	Yb	ppm	14.6	0.8	50	+/- 0.3
	Zr	ppm	111	15	40	+/- 5

# **CRM Details**

## Control Statistic Details

Control values for this material were determined during a dedicated certification program.

<u>Certification Date</u>

This material was certified with the above values on the 30th of May 2023.

<u>Source Material</u>
Prior to homogenisation and testing, this material was sourced from: Gascoyne region, Western Australia

<u>Material Type</u> Pulp Rare Earth ore, 10g samples.

### Usage

This product is for use in the mining industry as reference materials for monitoring and testing the accuracy of

### Preparation and Packaging

This reference material was dried in an oven for a minimum of 8 hours at 110C. The dry material is then pulverised in a bowl and puck mill and homogenised in a vee-blender. The material is then stored in a sealed, stable container ready for final packaging.

Materials are statistically sampled from stores, then packaged into heat sealed, air tight, plastic packets ready for distribution. All packaging has been chosen to ensure minimal contamination from outside sources during shipment,

<u>Assay Testwork</u>

This standard was tested in a dedicated certification program. In late 2022, 10 x 20g samples were sent to 6 laboratories for fusion / ICP analyses.
Assay distributions are checked and processed statistically, producing monitoring statistics for these standards. Materials are tested regularly to ensure stability and homogeneity.

<u>Stability</u>

This product remains stable in its original packaging, away from direct sunlight.

Material Safety
This product is not hazardous and non-toxic.

Earth | Rare